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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,746	07/30/2003	Leonid Bravinski	92953-7	6812
22463	7590	09/17/2007		
SMART AND BIGGAR 438 UNIVERSITY AVENUE SUITE 1500 BOX 111 TORONTO, ON M5G2K8 CANADA			EXAMINER SAFAVI, MICHAEL	
			ART UNIT 3637	PAPER NUMBER
			MAIL DATE 09/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/629,746	BRAVINSKI, LEONID	
	<b>Examiner</b>	<b>Art Unit</b>	
	M. Safavi	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8,12,13,15,16,21-25,29-31,34,35,46-56 and 69-122 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/29/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

***Election/Restrictions***

Applicant's election without traverse of the invention of Group I, formwork assembly, and the species of Fig. 4 in the reply filed on May 15, 2007 is acknowledged.

Newly submitted claims 84-90, 95-98, 108-113, 116, 117, and 121 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, 12, 13, 15, 16, 21-25, 29-31, 34, 35, 52, 55, 56, 69-83, 91-94, 99-107, 114, 115 drawn to a formwork assembly, classified in class 52, subclass 326.
- II. Claims 84-90, 95-98, 108-113, 116, 117, and 121 are, drawn to a form panel, classified in class 249, subclass 189.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the claimed combination can be used without a generally transversely oriented reinforcement unit or a support member oriented generally transverse to a general orientation of a depression of an upper surface of the panel member or a support portion interconnected to a reinforcement

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portion. The subcombination has separate utility such as utilization within a wall between panel members.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Since applicant has elected the invention to a formwork assembly prosecution on the merits will proceed with those claims directed to a formwork assembly. Accordingly, claims 84-90, 95-98, 108-113, 116, 117, and 121 are withdrawn from consideration as being directed to a non-elected invention.

Claims 22, 23, 52, 71, 101, 103, and 114 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species of the invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 15, 2007.

***Information Disclosure Statement***

The information disclosure statement filed November 29, 2004 fails to fully comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because no date of publication has been given for the reference listed as 37 under Non Patent Literature Documents. Further, the dates of publication for the references listed as 35 and 36 do not appear consistent. It is not clear as to the month and date of publication for either of the references listed as 35 and 36 under Non Patent Literature Documents with reference 35 having listed a date of what might appear to be March 24, 2003 while the reference 36 has listed a date that might be either June 10, 2003 or October 6, 2003. It has been placed in the application file, but the information referred to therein, with respect to the references listed as 35, 36, and 37 under Non Patent Literature Documents, has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8, 12, 13, 15, 16, 21-25, 29-31, 34, 35, 69, 70, 72-74, 93, 103, 105, 107, 114, 115, and 118-120 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 11 and 16, it is not clear as to what is being defined by "at least one spaced structural supporting member". From what is the "structural supporting member" spaced.

Claim 8, lines 1-2, "said extension portion" lacks antecedent basis within the claim. It is therefore, not clear as to what "said extension portion" refers. Line 2, "said reinforcement member" lacks antecedent basis within the claim. It is therefore, not clear as to what "said reinforcement member" refers. Line 3, "said first end portion" lacks antecedent basis within the claim. It is therefore, not clear as to what "said first end portion" refers.

Claim 69 appears directed to a "panel unit" when claim 72, from which claim 69 depends, appears directed to a formwork system. It is therefore, not clear as to what claim 69 defines.

Claim 70 appears directed to a "member" when claim 69, from which claim 70 depends, appears directed to a "panel unit" while claim 72, from which claim 69 depends, appears directed to a formwork system. It is therefore, not clear as to what claim 70 defines.

Claim 73, line 2, to what does "panel" refer?

Claim 74, line 2, to what does "panel" refer?

Claim 105 appears directed to a "system" when claim 104, from which claim 105 depends, appears directed to an "assembly". It is therefore, not clear as to what claim 105 defines.

Claim 107 appears directed to a "system" when claim 106, from which claim 107 depends, appears directed to an "assembly". It is therefore, not clear as to what claim 107 defines.

Claim 115 appears directed to a "system" when claim 91, from which claim 115 depends, appears directed to an "assembly". It is therefore, not clear as to what claim 115 defines.

Claim 118, line 8, it is not clear as to what is being defined by "said reinforcement unit being associated with said panel member". What, specifically, is being defined by "associated with"?

Claim 119 appears directed to a "unit" when claim 118, from which claim 119 depends, appears directed to a "formwork assembly". It is therefore, not clear as to what claim 119 defines.

Claim 120 appears directed to a "unit" when claim 91, from which claim 120 depends, appears directed to a "formwork assembly". It is therefore, not clear as to what claim 120 defines.

Claim 122 appears directed to a "form panel unit" when claim 55, from which claim 122 depends, appears directed to a "formwork assembly". It is therefore, not clear as to what claim 122 defines.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-4, 6, 8, 21, 25, 29, 30, 31, 72; 55, 94, 122; 75, 76, 78, 79; 91, 92; 99, 100; 118, and 119 are rejected under 35 U.S.C. 102(b) as being anticipated by Caine '090.** As for **claims 1, 25, and 29**, Caine '090 discloses, Figs. 1 and 5, a panel (D), reinforcement unit (B), and structural supporting member, (rib), (A) upon which reinforcement unit (B) is placed to support panel (D). The structural supporting member extends above the upper surface of the panel so that concrete can encase the supporting member, **(claim 72)**. A plurality of reinforcements (B) are placed transversely above the panel with a portion, (upper surface thereof), above the upper surface of the panel with an extension portion resting on a surface of a transverse web of the support member (A), **(claims 2-4, 6, 8, 30, and 31)**.

**Claims 55, 94, 122; 75-79; 91, 92; 99, 100, 102; 118, and 119 are rejected under 35 U.S.C. 102(b) as being anticipated by McDonald '024.**



McDonald '024 discloses, Fig. 2, panel member 22, reinforcement unit 21 having strengthening member 21c and structural supporting member, (rib), 20a, 20b. Upper surface of panel 22 can be seen, (Fig. 7), as possessing a longitudinally oriented downwardly extending portion.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 12, 13, 69, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine '090 in view of either of Martin '025 and Lathrop '723.**

Each of Martin '025 and Lathrop '723 teaches application of channel beam support members 1 within a composite floor assembly. Therefore, to have provided the Caine '090 floor assembly with channel beams as the support members in place of the members (A), thus utilizing an alternate support member within the construction, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by either of Martin '025 and Lathrop '723. Providing openings along an upper web portion of the resulting channel supporting member to allow for attachment to the tie or extension means, (including d'), of Caine '090, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Lathrop '723 as in Figs. 1 and 5.

**Claims 15, 16; 104, 105; 80, 81; 106, 107, and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine '090 in view of Carroll '641.**

Carroll '641 teaches application of polystyrene panels 13 within a composite floor assembly to provide for insulation therein. Therefore, to have provided the Caine '090 floor assembly with polystyrene as the or part of the panels (D), thus providing for insulation within the construction, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll '641.

**Claims 104, 105; 80, 81; 106, 107, and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald '024 in view of Carroll '641.**

Carroll '641 teaches application of polystyrene panels 13 within a composite floor assembly to provide for insulation therein. Therefore, to have provided the McDonald '024 floor assembly with polystyrene as the or part of the panels 22, thus providing for insulation within the construction, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll '641.

**Claims 34, 35; 82, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine '090 in view of Carroll '641 as applied to claims 15, 16; 104, 105; 80, 81; 106, 107, and 120 and further in view of Lin '111.**

Lin '111 discloses utilization of a foam roof panel component 3 having the upper and lower surfaces laminated with a polypropylene skin 1, 2. Therefore, to have

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provided the modified Caine '090 floor assembly polystyrene panels with the upper and lower surfaces laminated with a polypropylene skin, thus providing for a durable covering for the structural foam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll '641.

**Claims 82 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald '024 in view of Carroll '641 as applied to claims 104, 105; 80, 81; 106, 107, and 120 and further in view of Lin '111.**

Lin '111 discloses utilization of a foam roof panel component 3 having the upper and lower surfaces laminated with a polypropylene skin 1, 2. Therefore, to have provided the modified McDonald '024 floor assembly polystyrene panels with the upper and lower surfaces laminated with a polypropylene skin, thus providing for a durable covering for the structural foam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll '641.

**Claims 69, 70; and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine '090 in view of either of Staesina et al. '278 and Bodnar '724.**

Each of Staesina et al. '278 and Bodnar '724 teaches providing apertures within the beam of a composite floor assembly to allow for bonding between the concrete and the beam. Therefore, to have provided the Caine '090 floor assembly with support beams having apertures within the web or flange portions thereof, thus allowing for

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bonding between the concrete and each respective beam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll '641.

**Claims 69, 70; and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caine '090 in view of either of Martin '025 and Lathrop '723 as applied to claims 12, 13, 69, and 70 above, and further in view of Lin '111.**

Each of Staresina et al. '278 and Bodnar '724 teaches providing apertures within the beam of a composite floor assembly to allow for bonding between the concrete and the beam. Therefore, to have provided the modified Caine '090 floor assembly with support beams having apertures within the web or flange portions thereof, thus allowing for bonding between the concrete and each respective beam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll '641.

**Claims 56 and 115 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald '024 in view of either of Staresina et al. '278 and Bodnar '724.**

Each of Staresina et al. '278 and Bodnar '724 teaches providing apertures within the beam of a composite floor assembly to allow for bonding between the concrete and the beam. Therefore, to have provided the McDonald '024 floor assembly with support beams having apertures within the web or flange portions thereof, thus allowing for

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bonding between the concrete and each respective beam, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Carroll '641.

Claims 5, 7, 24, 73, 74, and 93 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (571) 272-7046. The examiner can normally be reached on Mon.-Thur., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



MICHAEL SAFAVI  
PRIMARY EXAMINER

M. Safavi  
August 03, 2007

Continuation of Disposition of Claims: Claims withdrawn from consideration are 22,23,46-54,71,84-90,95-98,101,103,108-114,116,117 and 121.

Continuation of Disposition of Claims: Claims rejected are 1-8,12,13,15,16,21-25,29-31,34,35,52,55,56,69-83,91-94,99-107,114,115,118-120 and 122.